

CLAIMS

What is claimed is:

1. A method of applying sealant to a non-circular closure comprising:

loading said closure onto a chuck, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

5 positioning said chuck so that said closure is in alignment with a stationary sealant dispenser;

rotating said chuck about an axis substantially perpendicular to the plane defined by said periphery and simultaneously translating said chuck in at least one linear axis within said plane such that said periphery of said
10 closure is maintained in alignment with said sealant dispenser;

dispensing said sealant about said periphery while said closure is simultaneously rotating and translating with respect to said sealant dispenser; and

unloading said closure from said chuck.

2. A closure sealant applicator machine for dispensing sealant to a periphery of non-circular closures comprising:

a sealant dispenser substantially fixedly mounted to said sealant applicator machine;

5 a chuck adapted to hold said closure in a plane;

a rotational motor in rotational communication with said chuck, said chuck adapted to rotate along an axis substantially perpendicular to said plane;

a translational mechanism adapted to linearly move said chuck along at least one axis within said plane; and

10 a controller adapted to simultaneously rotate and translate said closure with respect to said sealant dispenser to maintain said periphery of said closure in alignment with said sealant dispenser while said sealant dispenser dispenses said sealant.

3. A non-circular closure having sealant applied thereto which is manufactured by a method comprising:

loading said closure onto a chuck, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

5 positioning said chuck so that said closure is substantially aligned with a stationary sealant dispenser;

rotating said chuck about an axis substantially perpendicular to said plane and simultaneously translating said chuck in at least one direction in said plane such that said periphery of said closure is maintained in alignment
10 with said sealant dispenser;

dispensing said sealant about said periphery while said closure is simultaneously rotating and translating with respect to said sealant dispenser; and

unloading said closure from said chuck.

4. A non-circular closure having sealant applied thereto which is manufactured by a method comprising:

loading said closure onto a chuck, said chuck being mounted onto a rotating turret,

5 said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

positioning said chuck so that said closure is substantially aligned with a sealant dispenser that is fixedly mounted on said rotating turret;

rotating said chuck about an axis substantially normal to said plane
10 and simultaneously moving said chuck in a radial direction on said turret such that said periphery of said closure is maintained in alignment with said sealant dispenser.

5. A circular closure having sealant applied thereto which is manufactured by a method comprising:

loading the closure onto a chuck, said chuck mounted onto a rotating turret, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

5

positioning said chuck so that said closure is substantially aligned with a sealant dispenser that is fixedly mounted on said rotating turret;

rotating said chuck about an axis independently of any rotation derived by the rotation of said turret using a fully integrated servomotor.

6. A circular closure having sealant applied thereto which is manufactured by a method comprising:

loading the closure onto a chuck, said chuck mounted onto a rotating turret, said closure having a periphery about which said sealant is to be applied, said periphery defining a plane;

5

positioning said chuck so that said closure is substantially aligned with a sealant dispenser that is fixedly mounted on said rotating turret;

rotating said chuck about an axis independently of any rotation derived by the rotation of said turret using a motor and a remotely located controller.